

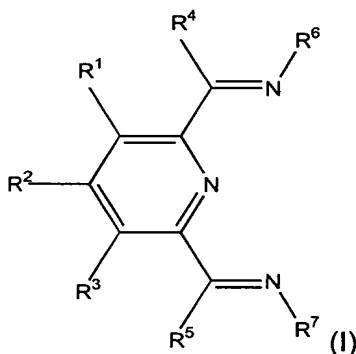
Listing of Claims

1. (original) A process for preparing an olefin copolymer, comprising the step of contacting:

(a) a monomer component comprising ethylene and a diene of the formula $\text{H}_2\text{C}=\text{CH}(\text{CH}_2)_n\text{CH}=\text{CHR}^{19}$, wherein R^{19} is hydrogen or an n-alkyl containing 1 to 18 carbon atoms, and n is 0 or an integer of 1 to 28; and

(b) an active copolymerization catalyst,
under conditions to copolymerize the monomers of the monomer component, wherein the active copolymerization catalyst comprises an iron complex of a 2,6-pyridinecarboxaldehyde-bis(imine) or a 2,6-diacylpyridinebis(imine).

2. (original) The process as recited in claim 1, wherein the active copolymerization catalyst comprises an iron complex of a tridentate ligand of the formula (I)



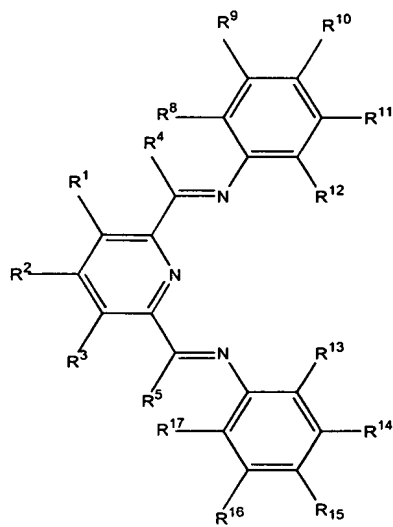
wherein:

R^1 , R^2 , R^3 , R^4 and R^5 are each independently hydrogen, hydrocarbyl, substituted hydrocarbyl or an inert functional group, provided that any two of R^1 , R^2 and R^3 vicinal to one another, taken together may form a ring; and

R^6 and R^7 are each independently aryl or substituted aryl.

3. (original) The process as recited in claim 1, wherein the monomer component further comprises one or more α -olefins of the formula $\text{H}_2\text{C}=\text{CHR}^{20}$, wherein R^{20} is n-alkyl containing 1 to 18 carbon atoms.

4. (original) The process as recited in claim 1 wherein the active catalyst is an iron complex of a tridentate ligand of the formula (VII)



(VII)

wherein:

R⁹, R¹⁰, R¹¹, R¹⁴, R¹⁵ and R¹⁶ is each independently halogen, alkyl containing 1 to 6 carbon atoms, or hydrogen;

R⁸ and R¹³ is each independently halogen, phenyl or alkyl containing 1 to 6 carbon atoms; and

R¹² and R¹⁷ is each independently halogen, phenyl, hydrogen, or alkyl containing 1 to 6 carbon atoms.

5. (original) The process as recited in claim 1, wherein n is 1, 2, 3, 4 or 6.
6. (original) The process as recited in claim 5, wherein n is 1, 2, 3 or 4.
7. (original) The process as recited in claim 1, wherein R¹⁹ is hydrogen or methyl.
- 8-14. (canceled).